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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/719,051 | 12/07/2000 | Satoshi Kondo | 0819-470 | 3424 |
| 20277 | 7590 | 01/03/2005 | EXAMINER | |
| MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096 | | | BUGG, GEORGE A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2636 | |

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/719,051

Applicant(s)

KONDO, SATOSHI

Examiner

George A Bugg

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31,33-39 and 41-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31,33-39 and 41-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's arguments filed 08/23/2004 have been fully considered but they are not persuasive. The Examiner maintains his rejection. Explanation to follow. The Examiner can find no record of the 1449 filed on March 7, 2001, and respectfully asks Applicant to submit a copy with future correspondence for consideration. If the references to be considered are part of an International Search Report, please list them separately on a 1449 for proper submission.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 31-34, 36, 39-42, and 44 are rejected under 35 U.S.C. 102(a) as being anticipated by US Patent No. 6,526,099 B1 to Christopoulos et al.

As for claims 31 and 39, Applicant claims **“An image processing method and apparatus characterized by comprising: decoding a first encoded stream, obtained by encoding an original video signal with a first resolution, and extracting a first encoding parameter (motion vector) from the first encoded stream; converting the original video signal decoded into a new**

Art Unit: 2636

video signal with a second resolution (element 113 of Figure 1); changing the first encoding parameter into a second encoding parameter for use in encoding the new video signal (motion vector scaler); and encoding the new video signal using the second encoding parameter, thereby generating a second encoded stream.” Figure 1, as well as column 6, lines 35-40,

wherein the bit stream BR1, or first encoded stream, is being decoded by VLD 101. The fact that BR1 is being decoded via VLD 101 indicates that an original video signal was encoded by way of a VLC (variable length encoder) and that said signal was encoded at some first resolution. In addition, encoders extract motion vectors, or encoding parameters, and perform motion compensation and or motion estimation in an effort to create quality video with high compression rates. As further shown by Christopoulos, in Figure 1 and column 6, lines 35-65, the original decoded video signal is converted into a new signal with a lower or second resolution. In addition, element 115, of Figure 1, (column 6, lines 53-65) as well as element 303, of Figures 3a and 3b, (column 8, lines 36-50) show encoding parameters, i.e. DCT coefficients, and or motion vectors, being down sampled or scaled, which is synonymous with changing an encoding parameter for use in encoding the new video signal, to create a second encoded bit stream.

As for the added limitation to claims 31 and 39 it has been shown that motion vectors are being scaled, or changed with respect to a first bit stream and a second bit stream. In addition, the new video signal, which is formed by converting the original signal into a signal with differing resolution, will contain data or pictures which pertain to the original signal,

and therefore a first motion vector, scaled into a second motion vector will still correspond to a similar picture, and each of the first and second motion vectors will be used to encode a different portion of the same picture which best matches its perspective motion vector.

3. With regard to claims 33 and 41, element 115, of Figure 1, (column 6, lines 53-65) as well as element 303, of Figures 3a and 3b, (column 8, lines 36-50) show encoding parameters, i.e. DCT coefficients, and or motion vectors, being down sampled or scaled, which is synonymous with changing an encoding parameter for use in encoding the new video signal, to create a second encoded bit stream.

4. With regard to claims 34 and 42, scaling motion vectors involves a predetermined arithmetic operation, wherein motion vectors are scaled or changed by a specific factor.

5. As for claims 36 and 44, element 115, of Figure 1, (column 6, lines 53-65) as well as element 303, of Figures 3a and 3b, (column 8, lines 36-50) show encoding parameters, i.e. DCT coefficients, and or motion vectors, being down sampled or scaled, which is synonymous with changing an encoding parameter for use in encoding the new video signal, to create a second encoded bit stream.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2636

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 35, 37, 38, 43, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,526,099 B1 to Christopoulos et al.

With regard to claims 37, 38, 45, and 46, although the Christopoulos reference does not specifically teach encoding compliant with the MPEG standard, a transcoder by definition is used to convert signals from one resolution to another, and or one standard to another. Therefore it would have been obvious to one of ordinary skill in the art to incorporate MPEG encoding into the standard encoder of Christopoulos for the purpose of creating a more robust transcoder.

Furthermore, column 17, lines 1-16 disclose that the transcoder is suitable for resolution changes, as well as adaptation to a specific bandwidth, as well as converting from one compression method to another.

8. As for claims 35 and 43, using a weighted average of motion vectors to represent a motion vector for a specific region of a picture is well known. (Official Notice)

Response to Arguments

9. ***Applicant argues that the Christopolous reference fails to teach, either expressly or inherently, a first encoding parameter, for a first group of blocks in the original video signal, being changed into a second encoding parameter for a second block in the new video signal. The***

Art Unit: 2636

Examiner must disagree. As previously stated, the Christopolous reference teaches that motion vectors are being scaled, or changed with respect to a first bit stream and a second bit stream. In addition, the new video signal, which is formed by converting the original signal into a signal with differing resolution, contains data or pictures which pertain to the original signal, and therefore a first motion vector, scaled into a second motion vector will still correspond to a similar picture, and each of the first and second motion vectors will be used to encode a different portion of the same picture which best matches its perspective motion vector. Motion vectors are in fact encoding parameters, as is known in the art, and therefore the cited references do in fact teach the limitations of the claimed invention. Moreover the reference also teaches signals with first and second resolutions, as well as encoding parameters, i.e. motion vectors and DCT coefficients being scaled for the purpose of encoding the second resolution video signal.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of

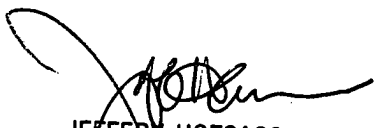
Art Unit: 2636

the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George A Bugg whose telephone number is (703) 305-2329. The examiner can normally be reached on Monday-Thursday 9:00-6:30, and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass, can be reached at 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George A Bugg
Examiner
Art Unit 2613

May 12, 2004



JEFFERY HOFSSASS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600